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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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[REDACTED] EXAMINER

HON, SOW FUN

ART UNIT	PAPER NUMBER
1772	71

DATE MAILED: 11/29/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/228,103	GOPAL, HARSH	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sow-Fun Hon	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 April 2001.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 16-20 is/are allowed.
- 6) Claim(s) 1-15 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)                    4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                    5) Notice of Informal Patent Application (PTO-152)  
 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.                    6) Other:

**DETAILED ACTION**

*Response to Amendment*

*Rejections Repeated*

1. The 35 U.S.C. 102(b) rejection of claim 1 as being anticipated by Rose has been repeated for the same reasons previously of record in Paper # 9 (mailed 01/19/01).
2. The 35 U.S.C 103(a) rejection of claims 2-4, 9, 11, 13, 15 over Rose has been repeated for the same reasons previously of record in Paper # 9 (mailed 01/19/01).
3. The 35 U.S.C. 103(a) rejection of claims 1-4, 9-15 over Bridgeford in view of Colliopolous has been repeated for the same reasons previously of record in Paper # 9 (mailed 01/19/01).

*Allowable Subject Matter*

4. Claims 16, 18 are allowed. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or suggest a food casing comprising an internal surface coating of a dried aqueous emulsion comprising polyglyceryl ester wherein the polyglyceryl ester consists essentially of a mixture of triglyceryltetraoleate and triglycerylmonooleate where the amount of triglyceryltetraoleate is greater than the amount of triglycerylmonooleate.

*Response to Arguments*

5. Applicant's arguments in Paper # 10 (filed 04/13/01) with regards to the valid application of Rose as a reference have been fully considered but they are not persuasive.

Art Unit: 1772

- a. Applicant argues that Rose does not suggest or desire water in the system.

Applicant is respectfully reminded that the final coating product as claimed, does not have any water in the system. Even though product by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The examiner has taken the position that since the resultant composition product is the same as presently claimed, there is no difference. While Applicant argues that the physical results of product by process limitations need not be set out and may not be disregarded, and that coatings applied from aqueous emulsion do not have the same coating properties as coatings applied from oil, using the paint industry as an example, Applicant is respectfully reminded that water-based latex paints are commonly used.

- b. Applicant argues that polyhydric alcohols are added specifically for a peeling composition, and that Rose might not be able to add them to the composition even if aware of the possibility since they are incompatible with oil. Applicant is respectfully reminded that the polyglycerol monooleate and other polyols listed by Rose are polyhydric alcohols ('920, column 4, lines 1-15). See Hawley's Condensed Chemical Dictionary, 13<sup>th</sup> Edition, pp. 900, 903.

- c. Applicant argues that Rose does not suggest triglyceryltetraoleate. Applicant is respectfully reminded that Rose teaches polyglyceryl monooleate and polyethoxy

trioleate ('920, column 4, lines 1-15), suggesting the use of triglyceryltrioleate to one of ordinary skill in the art.

d. Applicant argues that no oil is "required" in the pending claims. Applicant is respectfully reminded that the term "comprising" does not preclude the presence of oil.

3. Applicant's arguments in Paper # 10 (filed 04/13/01) with regards to the valid combination of Bridgeford in view of Colliopoulos et al. have been fully considered but they are not persuasive.

e. Applicant argues that Bridgeford does not disclose or suggest the use of a polyglyceryl ester for any purpose. Applicant is respectfully reminded that Colliopoulos et al. is being used as the secondary reference to compensate for the deficiency of the primary reference which is Bridgeford. Colliopoulos teaches that these water-in-oil emulsions are used in preparing edible food products ('632, abstract) and that the claimed emulsifying agents provide emulsions physically stable for one year ('632, column 1, lines 1-35), thus providing the advantage and hence the motivation to use these emulsifying agents in place of the emulsifying agent of sorbitan triooleate in the coating of Bridgeford for improving peelability of sausage casing ('981, column 1, lines 30-65 and column 3, lines 25-35). Bridgeford does expressly address the improvement of the peelability of sausage casings with the coatings ('981, column 1, lines 45-50).

### *Conclusion*

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (703)308-3265. The examiner can normally be reached Monday to Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (703)308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

8A  
11/15/01

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

11/19/01

*Hawley's*

*Condensed Chemical*

*Dictionary*

*THIRTEENTH EDITION*

*Revised by*  
Richard J. Lewis, Sr.



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Dedicated to  
Peter R

Special thanks  
Peter R

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by (1) direct esterification and (2) transesterification reactions. Combustible.

Some examples of (1): decaglycerol monostearate, semisolid, d 1.04, mp 51.9C; decaglycerol monooleate, viscous liquid, d 1.13, mp around 0C; decaglycerol hexaoleate, liquid, d 0.97, mp -17.7C.

Examples of (2): triglycerol monolinoleate, viscosity 322 cP (75.5C); triglycerol trilinoleate, viscosity 30.1 cP (75.5C).

**Use:** Lubricants, plasticizers, paint and varnish vehicles, gelling agents, urethane intermediates, adhesives, cross-linking agents, humectants, textile fiber finishes, functional fluids, surface-active agents, dispersants and emulsifiers in foods, pharmaceuticals, cosmetic preparations.

**polyglycol.** See polyethylene glycol.

**polyglycol amine H-163.**



**Properties:** Colorless liquid. D 1.0556, bp (decomposes), fp 14.5C, bulk d 8.8 lb/gal, flash p 295F (146C). Soluble in water. Combustible.

**polyglycol distearate.** (polyethylene glycol distearate).

CAS: 9005-08-7.

$\text{C}_{17}\text{H}_{35}\text{COO}(\text{CH}_2\text{CH}_2\text{O})_n\text{OCC}_{17}\text{H}_{35}$ . Distearate ester of polyglycol.

**Properties:** A soft, off-white solid. D 1.04 (50C), mp 43C, pH of 10% dispersion 7.26, saponification number variable. Soluble in chlorinated solvents, light esters, and acetone; slightly soluble in alcohols; insoluble in glycols, hydrocarbons, and vegetable oils. Combustible.

**Use:** Plasticizer for various resins, component of grinding and polishing pastes to promote easy removal in water.

**"Polygriptex."** TM for an adhesive especially designed for bonding polyethylene sheeting to porous surfaces, used in making polyethylene-lined bags and multiwall kraft bags. Has good adhesion to waxed surfaces. Available in viscosities from 300 to 20,000 cP.

**polyhalite.**  $2\text{CaSO}_4 \cdot \text{MgSO}_4 \cdot \text{K}_2\text{SO}_4 \cdot 2\text{H}_2\text{O}$ . A naturally occurring potash salt found in Germany, Texas, and New Mexico.

**Use:** Source of potash for fertilizer.

**polyhexamethyleneadipamide.** Same as nylon 66.

**polyhexamethylene sebacamide.** Same as nylon 610.

**polyhydric alcohol.** See polyol.

**polyimide.** Any of a group of high polymers that have an imide group (-CONHCO-) in the polymer chain.

**Properties:** Tensile strength 13,500 psi, d 1.42, water absorption 0.3% (24 h at 77K), heat distortion point above 260C, dielectric constant at 2000 mc 3.2, and coefficient of linear expansion  $28.4 \times 10^{-6}$  inch/inch/foot. High-temperature stability (up to 370C), excellent frictional characteristics, good wear resistance at high temperatures, resists radiation, exhibits low outgassing in high vacuum, resistant to organic materials at quite high temperatures, not resistant to strong alkalies and to long exposure to steam. Flame retardant.

**Use:** High-temperature coatings, laminates and composites for aerospace vehicles, ablative materials, oil sealants and retainers, adhesives, semiconductors, valve seats, bearings, insulation for cables, printed circuits, magnetic tapes (high- and low-temperature-resistant), flame-resistant fibers, binders in abrasive wheels.

**polyindene resin.** See coumarone-indene resin.

**polyisobutene.** See polybutylene.

**polyisobutylene.** See polybutylene.

**polyisocyanurate.** See isocyanurate.

**polyisoprene.** ( $\text{C}_5\text{H}_8$ )<sub>n</sub>. The major component of natural rubber, also made synthetically. Forms are stereospecific *cis*-1,4- and *trans*-1,4-polyisoprene. Both can be produced synthetically by the effect of heat and pressure on isoprene in the presence of stereospecific catalysts. Natural rubber is *cis*-1,4; synthetic *cis*-1,4- is sometimes called synthetic natural rubber. *trans*-1,4-Polyisoprene resembles gutta-percha. Polyisoprene is thermoplastic until mixed with sulfur and vulcanized. Supports combustion.

See rubber, natural; rubber, synthetic; catalyst, stereospecific.

**"Polylite"** [Reichhold]. TM for a group of 100% reactive alkyd resins, dissolved in styrene and other monomers. Highly diversified applications both alone and in combination with such materials as fibrous glass. This group also includes resins for use with diisocyanate to form rigid or flexible polyurethane foams.

**"POLYMEKON"** [Petrolite]. TM for a dispersion.

**polymer.** A macromolecule formed by the chemical union of five or more identical combining units called monomers. In most cases the number of monomers is quite large (3500 for pure cellulose) and often is not precisely known. In synthetic polymers this number can be controlled to a predetermined extent, e.g., by short-stopping agents. (Combinations of two, three, or four monomers are called, respectively, dimers, trimers, and tetramers and are known collectively as oligomers.) A partial list of polymers by type is as follows:

- I. Inorganic: silicones, boron-nitride
- II. Organic
  - 1. Natural
    - (a) Polysaccharides (arabic gum, cellulose, etc.)
    - (b) Polypeptides (globulin, keratin, collagen, etc.)
    - (c) Hydrocarbons (polymethane, etc.)
  - 2. Synthetic
    - (a) Thermoplastic polymers (nylon, polyesters, polypropylene, polycarbonate, etc.)
    - (b) Thermosetting polymers (epoxy resins, phenolic resins, etc.)
  - 3. Semisynthetic cellulose, cellulose acetate (starch acetate, etc.)

**polymer, additive.**

**polymer, attaching.**

**polymer, block.**

**polymer, condensation.**

**polymer, coordination.**

**polymer, electronic.**

...omer made by the addition of a substance to a polymer (e.g., aldehydes, ketones, etc.). The proportion of the substance to the polymer determines the properties of the mixture. Polymer resins, salts of polystyrene, and other substances are soluble in water. Pyrolytic decomposition of polymers is an important process. Polymers are made conductive by the addition of arsenic pentoxide. See polyacetylene.

**polymer eutectic.**

...void of any solvent.

**polymer, graft.**

**polymer, high molecular weight.**

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Temperature limit 170C, d 0.83.

**Use:** Laboratory ware (beakers, graduates, etc.); electronic and hospital equipment; food packaging, especially types subject to high temperature such as trays for TV dinners, etc.; light reflectors.

**poly(methyl vinyl ether).** See polyvinyl methyl ether.

**polymorphism.** See allotropy.

### polymyxin.

CAS: 1406-11-7. Generic term for a series of antibiotic substances produced by strains of *Bacillus polymyxa*. Various polymyxins are differentiated by the letters A, B, C, D, and E. All are active against certain Gram-negative bacteria. Polymyxin B is most used.

**Properties:** All are basic polypeptides. Soluble in water; the hydrochlorides are soluble in water and methanol, insoluble in ether, acetone, chlorinated solvents, and hydrocarbons. Permissible food additives.

**Use:** Medicine (antibiotic), beer production.

**"Poly-N". [Monsanto].** (ammonium polyphosphate). TM for chemical used as a phosphorus-based catalyst in organic as well as latex-based products.

**Use:** Fire-retardant intumescent paints, mastics, and polymers.

**polynuclear.** Descriptive of an aromatic compound containing three or more closed rings, usually of the benzenoid type, e.g., sterols. See polycyclic; nucleus (3).

**polyol.** A polyhydric alcohol, i.e., one containing three or more hydroxyl groups. Those having three hydroxyl groups (trihydric) are glycerols; those with more than three are called sugar alcohols, with general formula  $\text{CH}_2\text{OH}(\text{CHOH})_n\text{CH}_2\text{OH}$ , where  $n$  may be from 2 to 5. These react with aldehydes and ketones to form acetals and ketals. See alcohol; glycerol.

**polyolefin.** A class or group name for thermoplastic polymers derived from simple olefins; among the more important are polyethylene, polypropylene, polybutenes, polyisoprene, and their copolymers. Many are produced in the form of fibers. This group comprises the largest tonnage of all thermoplastics produced.

**polyorganosilicate graft polymer.** An organoclay to which a monomer or an active polymer has been chemically bonded, often by the use of ionizing radiation. An example is the bonding of styrene to a polysilicate containing vinyl radicals, resulting in the growth of polystyrene chains from the

surface of the silicate. Such complexes are stable to organic solvents. They have considerable use potential in the ion-exchange field, as ablative agents, reinforcing agents, and hydraulic fluids. See organoclay; graft polymer.

**"Polyox"** [Union Carbide]. TM for a series of water-soluble ethylene oxide polymers with molecular weights in the 100,000 to several million range.

**Use:** Textile warp size, paper coatings, detergents, hair spray, toothpastes, water-soluble packaging film, adhesives.

**polyoxadiazole.** A polymer of oxadiazole, cyclic  $\text{C}_2\text{N}_2\text{O}$ , prepared by cyclodehydration (ring formation from a chain with subsequent loss of water) of polyisophthalic hydrazide. Because of its high temperature tolerance (above 398C), fibers made from it may be useful for space vehicles.

**polyoxamide.** A nylon-type material made from oxalic acid and diamines.

**polyoxetane.** See oxetane; "Penton" [Aqualon].

**polyoxyethylene.** See polyethylene glycol.

**polyoxyethylene fatty acid ester.** See polysorbate.

### polyoxyethylene (40) monostearate.

(polyethylene glycol stearate).

CAS: 9004-99-3. A mixture of the mono- and di-stearate esters of mixed polyoxyethylene diols and corresponding free glycols. The monostearate can be represented as  $\text{H}(\text{OCH}_2\text{CH}_2)_n\text{OCOC}_{17}\text{H}_{35}$  ( $n$  is about 40).

**Properties:** Waxy, light-tan solid; nearly odorless. Congealing range 39–45C. Soluble in water, alcohol, ether, and acetone; insoluble in mineral and vegetable oils.

**Grade:** USP.

**Use:** Ointments, emulsifier, surfactant, food additive. See polysorbate.

**polyoxyethyleneoxypropylene.** (POEOP). A polymer of ethylene and propylene glycols (ethylene oxide propylene oxide).

**Use:** Solvent.

### polyoxyethylene (8) stearate.

CAS: 9004-99-3. A mixture of the mono- and diesters of stearic acid and mixed polyoxyethylene diols having an average polymer length of 7.5 oxyethylene units.

**Properties:** Cream-colored, soft, waxy, or pasty solid at 25C; faint, fatty odor; slightly bitter, fatty taste. Soluble in toluene, acetone, ether, and ethanol.

**Use:** Emulsifier in bakery products. See polysorbate.